1: Grigson G-5 (1927-1934) 1949
AW32 Gond AW32
Hill Maria
Bison Horn Maria

CHAPTER IV

PERSONAL APPEARANCE; PHYSICAL POWERS AND ENDURANCE; BODILY ATTITUDES; CLEANLINESS; HAIR-DRESSING; DRESS AND ORNAMENTS OF (A) HILL, (B) BISON-HORN MARIAS; WEAPONS AND TOOLS

142 To the amateur observer few things are so hard as correctly to record the physical appearance of tribes, and I must leave the reader to draw his own conclusions from the illustrations of individuals in Plates I, V to VII, XI, XV, XVII to XIX and XXIII, and the Appendix on anthropometric measurements by Mr. R. C. Roy. Certain very general remarks may, however, be made. In stature Marias of both types seem greater than the average Central Provinces Gond; though the general average for men may not exceed 5 ft. 5 in., yet tall individuals are by no means unknown, especially among the Bison-horn Marias of the Dantewara valley and the adjacent parts of the Jagdalpur tahsil; there were two convict warders undergoing twelve years' sentences for murder in Jagdalpur Jail until recently from near Palnar, between Kuakonda and Aranpur, who were fine physical specimens and nearly 6 ft. in height. Among the Hill Marias it is perhaps rare to see anyone more than 5 ft. 8 in. high.

Appearance

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142 The ordinary Gond type, dark-skinned, with straight, coarse, black hair, little or no beard and moustache, platyrrhine nose, prognathous, wide, downward-curving mouth with thick lips, in fact 'india-rubber faced', with squat but fairly proportioned body, is not unknown among the Marias, especially the Hill Marias towards the fringes of the hills, and the Bison-horn Marias in contact with the Telugu in the south. But the absence of facial hair has been exaggerated by past observers, possibly because at least in the Abujhmar mountains it is usually the unmarried youths on the verge of manhood who are deputed by the villages as camp followers; men with moustaches or small pointed beards are not uncommon. The growth of hair is much less than that of the European, and a shave is not a frequent necessity. Possibly the Bison-horn Maria grows more than the Hill Maria. Flat noses are not as common as among the Central Provinces Gonds, and at times an almost aquiline nose will be met. The nostrils are, however, always distended, and presumably most Marias of both types would be mesorrhine, tending to platyrrhine with a few leptorrhine

1: Grigson G-5 (1927-1934) 1949
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Appendix V

Anthropometric Analysis of the Hill and Bison-horn Marias

By Mr. Ramesh Chandra Roy, M.Sc., B.L.,
Joint Editor, *Man in India*

I accompanied Mr. W. V. Grigson in his March 1934 tour in the Hill and Bison-horn Maria country of the Bastar State, and was able to measure 100 Hill Maria and 50 Bison-horn Maria males; a severe attack of fever unfortunately prevented me from measuring as many Bison-horn as Hill Marias. I measured the Hill Marias in the Abujhmar hills camps at Orcha, Adeq, Itulnar, Hikul and Handawada from these and adjacent Hill villages in the *parganas* of Chhota Dongar Mar, Kutru Mar, Bhairamgarh Mar, and Barsur (Dantewara) Mar. The Bison-horn Marias were nearly all measured in the camp at Aranpur in Dantewara tahsil, near the head of the pass leading down from the Dantewara plateau to the Dorla country of the Konta tahsil; the men were mostly from Aranpur and Chameli *parganas*. I append tables summarizing the results of my measurements; space has forbidden the reproduction here of the long tables of individual measurements, which I hope subsequently to publish elsewhere. I have followed R. Martin's anthropometric technique.

General description

Both Hill and Bison-horn Marias are generally of medium stature, though tall and short individuals are not uncommon. The mean heights of those measured were 162·7 cm. Hill, and 161·7 cm. Bison-horn Maria. They are very well built, with well-proportioned body and limbs. Their skin colour varies from pale wheat to light black (the actual figures were: out of 100 Hill Marias, 9 light brown, 60 brown, 16 dark brown and 15 light black; out of 50 Bison-horn Marias, 3 pale wheat, 5 light brown, 26 brown, 9 dark brown and 7 light black). They have a thick growth of hair on the head, but often cut it short or even shave it in front and round the peripheral region of the head, leaving a long crown-tuft. They have very little facial and body hair, and even those who can grow sparse beards and moustaches often have them clean shaved. The hair is black or dark brown, and is wavy or curly.

Their foreheads are retreating, but straight foreheads are not rare; of 100 Hill Maria foreheads 16 were straight, 57 slightly

1: Grigson G-5 (1927-1934) 1949
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retreating and 27 retreating. The corresponding figures for 50 Bison-horn foreheads were 4, 35 and 11. The supra-orbital ridges are not generally as well developed as those of some other Pre-Dravidian tribes.

The eye-slits are straight, but oblique eyes occasionally occur. I did not see a single epicanthic fold, or even a tendency to one. The eyes are generally black, often with a reddish hue, but grey and dark brown eyes also occur. The nasal root is slightly or moderately depressed, with a straight nasal bridge, though a concave nasal bridge is not uncommon. The nose is rather broad with fairly broad nostrils.

The lips are as a rule thick, but thin and medium lips are also occasionally found. The lower lip is often slightly or moderately everted, or tends to be everted.

The face is frequently oval and prognathous, and the malars and zygomatic arches are generally well marked. The usual chin is oval, but square chins occur. The mandibular angle is rather broad, and the face in consequence pentagonal, round or square.

The women have generally a round or oval face, concave platyrrhine noses and everted lips. Their nipples are very big and plug-like, resembling those of Negro women.

Indices

Analysis of the metric data gives the following results[1] :—

Cephalic Index. The classification of the men measured was :—

	Hill Maria	*Bison-horn Maria*
Dolichocephalic	75	30, or 60%
Mesocephalic	22	17, or 34%
Brachycephalic	3	3, or 6%
TOTAL	100	50

The Hill Maria cephalic index averaged 76·16 ± ·22, ranging from 67·5 to 83·2, and the Bison-horn Maria 76·21 ± ·27, ranging from 68·8 to 86·0.

Length-Height Head Index. The classification of the men measured was :—

	Hill Maria	*Bison-horn Maria*
Hypsicephalic	77	36, or 72%
Orthocephalic	18	14, or 28%
Platycephalic	5	Nil
TOTAL	100	50

[1] For classifications, see Haddon, *Races of Man*, pp. 10-12.

1: Grigson G-5 (1927-1934) 1949
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[141] *Altitudinal Index* averaged 65·11 ± ·24 for Hill Marias, ranging from 55·3 to 78·3, and 64·81 ± ·31 for Bison-horn Marias, ranging from 58·3 to 71·7.

Nasal Index. The classification of the men measured was :—

	Hill Maria	*Bison-horn Maria*
Leptorrhine	8	1, or 2%
Mesorrhine	58	30, or 60%
Platyrrhine	34	19, or 38%
TOTAL	100	50

The Hill Maria nasal index averaged 81·51 ± ·48, ranging from 61·1 to 97·7, and the Bison-horn Maria 82·9 ± ·65, ranging from 65·4 to 98·0.

Morphological Facial Index.[1] The classification of the men measured was :—

	Hill Maria	*Bison-horn Maria*
Hyper-europrosopy	11	5, or 10%
Europrosopy	28	18, or 36%
Mesoprosopy	31	18, or 36%
Leptoprosopy	26	8, or 16%
Hyper-leptoprosopy	4	1, or 2%
TOTAL	100	50

The Hill Maria morphological facial index averaged 85·63 ± ·33, ranging from 73·4 to 97·4, and the Bison-horn Maria 84·6 ± ·36, ranging from 76·1 to 96·7.

How far are the Hill and Bison-horn Marias alike in their physical features?

[142] **Comparison of Hill and Bison-horn Marias**

At first sight one notices that the Bison-horn Marias are a little lighter in skin colour than the Hill Marias. But if we look to the comparative tables (Tables I and II below) of the means with probable errors for the different absolute measurements and indices, we shall not hesitate to say that there is very little difference between the two. No doubt if we calculated the probable errors of the respective mean differences and co-efficients of racial likeness our calculations would reveal dissimilarities in most of their characteristics; but these dissimilarities would not be great enough to show any real difference between Hill and Bison-horn Marias. I have, however, refrained from calculating the respective probable errors of the mean differences and co-efficients of racial likeness, because if I

[text continues on p. 317]

[1] Martin, *Anthropometry*, Vol. I.

1: Grigson G-5 (1927-1934) 1949
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TABLE I

STATISTICAL ANALYSIS OF ANTHROPOMETRIC MEASUREMENTS OF 100 ADULT MALE HILL MARIAS

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Measurement	Unit	Mean	Probable error of mean	Standard deviation	Probable error of standard deviation	Coefficient of variation	Probable error of variation
ABSOLUTE MEASUREMENTS							
Stature	cm.	162·70	±·37	5·56	±·27	3·41	±·16
Head height	mm.	119·93	±·46	6·79	±·32	5·66	±·27
Head length	mm.	185·39	±·41	6·11	±·29	3·30	±·18
Head breadth ..	mm.	138·71	±·30	4·51	±·21	3·25	±·15
Least frontal breadth	mm.	101·66	±·29	4·44	±·21	4·36	±·22
Bizygomatic breadth	mm.	132·17	±·37	5·54	±·26	4·19	±·20
Bi-gonial breadth ..	mm.	88·03	±·40	5·93	±·28	6·74	±·32
Inter-orbital length ..	mm.	32·23	±·17	2·58	±·12	8·00	±·32
Bi-orbital length ..	mm.	94·62	±·30	4·38	±·21	4·63	±·22
Nasal length	mm.	48·97	±·23	3·45	±·16	7·04	±·34
Nasal breadth ..	mm.	39·68	±·17	2·46	±·12	6·20	±·30
Nasal height	mm.	16·33	±·12	1·78	±·09	10·90	±·53
Nasion-prosthion length	mm.	65·60	±·29	4·22	±·20	9·26	±·44
Nasion-gnathion length	mm.	113·22	±·43	6·30	±·30	5·56	±·27
Nasal arc	mm.	110·05	±·40	5·87	±·28	5·33	±·25
INDICES							
Cephalic	—	76·16	±·22	3·30	±·18	4·33	±·21
Altitudinal	—	65·11	±·24	3·57	±·17	5·48	±·26
Nasal	—	81·51	±·48	7·06	±·34	8·66	±·41
Facial	—	85·63	±·33	4·93	±·23	5·73	±·27

1: Grigson G-5 (1927-1934) 1949
AW32 Gond AW32

Bison Horn Maria

TABLE II

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STATISTICAL ANALYSIS OF ANTHROPOMETRIC MEASUREMENTS OF 50 ADULT MALE BISON-HORN MARIAS

Measurement	Unit	Mean	Probable error of mean	Standard deviation	Probable error of standard deviation	Coefficient of variation	Probable error of variation
ABSOLUTE MEASUREMENTS							
Stature	cm.	161·70	±·47	4·90	±·33	3·05	±·21
Head height ..	mm.	117·14	±·47	4·90	±·33	4·18	±·28
Head length	mm.	181·38	±·52	5·50	±·37	3·03	±·20
Head breadth ..	mm.	138·46	±·53	5·53	±·37	3·99	±·27
Least frontal breadth	mm.	100·16	±·36	3·77	±·25	3·74	±·25
Bizygomatic breadth	cm.	130·68	±·49	5·10	±·34	3·90	±·26
Bi-gonial breadth ..	mm.	86·50	±·43	4·54	±·31	5·25	±·35
Inter-orbital length ..	mm.	30·44	±·30	3·18	±·21	10·45	±·72
Bi-orbital length ..	mm.	92·82	±·34	3·60	±·24	3·42	±·23
Nasal length	mm.	49·04	±·31	3·24	±·22	6·61	±·45
Nasal breadth ..	mm.	39·84	±·25	2·57	±·17	6·45	±·44
Nasal height	mm.	15·86	±·17	1·74	±·12	1·10	±·07
Nasion-prosthion length	mm.	63·84	±·37	3·87	±·26	6·06	±·41
Nasion-gnathion length	mm.	110·40	±·46	4·81	±·32	4·38	±·30
Nasal arc	mm.	107·92	±·45	4·66	±·31	4·32	±·29
INDICES							
Cephalic	—	76·21	±·27	2·81	±·19	1·56	±·11
Altitudinal	—	64·81	±·31	3·23	±·22	4·98	±·34
Nasal	—	82·90	±·65	6·86	±·46	8·26	±·56
Facial	—	84·60	±·36	3·76	±·25	4·44	±·30

1: Grigson G-5 (1927-1934) 1949
AW32 Gond AW32
Hill Maria
Bison Horn Maria

had been able to measure 100 instead of only 50 Bison-horn Marias, their measurements might have averaged the same as those of the 100 Hill Marias measured. Yet from the data obtained we can fairly say that on the average both Hill and Bison-horn Marias are dolichocephalic, hypsicephalic, mesorrhinic (leaning towards platyrrhinic), europrosopic and medium-statured peoples.

What is the cause of the mesocephalic and mesorrhinic elements actually present in both the peoples? Is it not the outcome of the mixture of the dolichocephalic and brachycephalic elements on the one hand, and the leptorrhine and platyrrhine elements on the other, actually present in both? The dolichocephaly and platyrrhiny, the dark brown skin and other elements are probably the real characteristics of these pre-Dravidian (proto-Australoid) peoples. But how are we to explain the small proportion of leptorrhiny and brachycephaly and the large and mutually equal proportions of europrosopy, leptoprosopy and mesoprosopy in these two predominantly dolichocephalic and mesorrhine peoples?

Racial Affinities

Dr. Haddon[1] finds in the original pre-Dravidian Gond a Pareoean strain, which causes the brachycephalic head form, the broad prognathous face and the occasional obliquity of the eye-slits.[2] As against this theory it may be pointed out that there is an absence of the true epicanthic fold (at least I have found none), and of the yellowish skin, which are the main characteristics of the Pareoeans.[3] Moreover, the leptorrhine element in the Hill and Bison-horn Marias cannot be explained by such an assumption.

It is interesting to note that a good percentage of Marias also conform to Dr. Haddon's Dravidian[4] group in all essential characteristics, namely dolichocephaly, medium stature, oval face, mesorrhiny, plentiful wavy or curly hair, and brown skin of varying shades.

[1] Haddon, *Races of Man*, 1929, p. 20.

[2] Cf. Hutton, *India Census Report*, 1931, Vol. I: 'It also seems possible that the vague suggestion of the mongoloid, which is so often given by the appearance of the hillmen of Chota Nagpur, of Bastar State in the Central Provinces and of the Madras Agency tracts, may be due to a strain of Pareoean blood which has come in by sea from the east. One is insistently reminded in these areas of the Assam hill tribes, and both Haddon and Buxton have drawn attention to this strain, which struck the present writer quite independently and contrary to his expectations; and the admitted proto-australoid element in these tribes is no obstacle to this, since it must have extended at some period through what is now the archipelago to the Australian Continent, apart from the probability of its absorption on the mainland.'

[3] Haddon, ibidem, p. 32.

[4] Ibidem, p. 21.

1: Grigson G-5 (1927-1934) 1949
AW32 Gond AW32
Hill Maria
Bison Horn Maria

It may thus not be unreasonable to infer that a basic pre-Dravidian (proto-Australoid) element in the Hill and Bison-horn Marias has been modified by a considerable Dravidian element, and tinged either with a Pareoean element, or, probably, with some Alpinic[1] element (cf. the presence of leptorrhine, hypsicephalic and brachycephalic elements in both Hill and Bison-horn Marias), or with both a Pareoean and an Alpine element.

[1] Haddon, *Races of Man*, 1929, p. 26.

2: Elwin E-5 (1935-1942) 1947 AW32 Gond AW32
Muria

619 given up eating beef, and either never had or have abandoned the ghotul system. Their influence is gradually making itself felt in the south of Kondagaon to the east of the road, where the Ghotul Muria call those who have separated themselves from them 'Bhattra'. This is probably the best name for the Raja Muria of Jagdalpur. Indeed it would be a great convenience if we could call the western Muria 'Jhoria', the Muria of Kondagaon 'Muria' and the Muria of Jagdalpur 'Bhattra'. It may be that one day they will call themselves by these titles, and then we can follow suit.

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However, there is no intermarriage between the Raja Muria or Bara Bhattra of Jagdalpur, but it continues naturally enough with the Bhattra Muria or ordinary Muria just across the border of the tahsil. It is evident, however, that the Muria think of themselves as a single people, related (it is true) to several others, but having one common rallying point in the ghotul founded by Lingo Pen, the father of the tribe.

IV. Physical Characters of the Muria

142 At the end of February 1942, Dr B. S. Guha, of the Zoological Survey of India, accepted my invitation to visit Bastar in order to examine the physical characters of the Muria. He joined me at Dongrigura in the Kondagaon Tahsil, where he measured 52 adult male Muria, and we then went on to Markabera in the Abujhmar foothills. Here he measured 51 adult male Muria of this and surrounding villages. He has written a detailed account which is printed elsewhere, but the following brief description may be inserted here.

'The difference', he writes, 'between the plains Muria of Kondagaon and the Abujhmar foothills Muria, in all essential physical characters, is hardly significant except to a small extent in the shape of the nose. The latter have a slightly longer, narrower and more prominent nose as compared to the former. This difference may be fortuitous and may disappear if larger samples are taken, a view to which I am provisionally inclined, though the possibility of some genuine difference in this respect between the two cannot be altogether ruled out.

'Taking the two groups together the Muria are a short-statured long-headed race with broad cheek bones and rather short pearish type of face. Alike in the absolute measurements (mean H.L. 185·56±0·35; H.B. 138·56 ±0·29 and mean C.I. 74·72±0·18) and the bulging of the occiput, the head is essentially dolichocephalic; there is hardly any true brachycephaly noticeable. The forehead is on the average well-arched but in an appreciable number it tends to be vertical. The supraorbital ridges vary from moderate to well-marked—in a few they are very prominent. On the whole the face tends to project forwards—approximately one-half of the people being prognathic. The nose is usually flat and broad and the nasal root depressed, the lips thick and the chin retreating. In a small number, however, the face is longish, the lips thin, and the chin well developed and some even show a prominent nose with a tendency to aquilinity.

[141]

'The skin colour is on the average dark chocolate brown, though individuals with brown and even yellowish brown skin colour are not wanting. The hair is black and varies between straight and wavy with a few persons showing curly hair. It is usually very rich on the head but only moderate on the lips and face. The body hair is rather slight.

'The eye colour is generally black and the eye is horizontal but in seven men examined it was undoubtedly oblique and in a few cases traces of the

TABLE 13

Showing the averages of the different Somatic measurements of some tribes of India

Name of tribes	Kharia	Kol	Uraon	Santal	Munda	Oraon	Hill Marias	Bison Horn Marias	Mal Paharia	Santal	Santal
Locality	Chota Nagpur	U.P.	S. India	Bengal	Chota Nagpur	Chota Nagpur	Bastar State	Bastar State	Bengal	Santal Parganas	Santal Parganas
Number of subjects Measured by	78 Risley	32 Risley	50 Guha	100 Risley	100 Risley	100 Risley	100 Roy	50 Roy	100 Risley	100 Chatterji & Kumar	100 Biswas
Stature	1601.0	1650.0	1594.90 ±4.33	1614.0	1589.0	1621.0	1627.0	1617.0	1577.0	1604.78 ±4.74	1593.0 ±3.40
Max. Head Length	184.5	183.1	190.02 ±0.48	184.8	185.9	184.6	185.39	181.38	183.4	185.27 ±0.65	185.0 ±0.06
Max. Head Breadth	137.4	132.6	139.34 ±0.30	140.7	138.6	139.3	138.71	138.46	139.1	138.35 ±0.51	137.0 ±0.05

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4: Biswas D, E-3,4 (1931-1945) 1956
AW42 Santal AW42
SANTAL PARGANAS
GOND AW32

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Name of tribes	Khasis	Kol	Hoya	Santal	Munda	Oraon	Hill Maria	Bison Horn Maria	Mal Pahariya	Santal	Santal
Locality	Chota Nagpur	U.P.	S. India	Bengal	Chota Nagpur	Chota Nagpur	Bastar State	Bastar State	Bengal	Santal Parganas	Santal Parganas
Auricular height	129.8	127.2	129.62 ±0.84	128.5	129.2	129.2	129.93	127.14	126.5	123.37 ±0.37	129.0 ±0.10
Min. Frontal breadth	101.0	97.1	101.22 ±0.36	102.1	101.3	101.9	101.66	100.16	100.5	101.27 ±0.60	100.1 ±0.12
Max. Bizygomatic breadth	130.8	130.8	128.76 ±0.43	132.5	130.7	130.4	132.17	130.68	130.9	130.64 ±0.38	132.0 ±0.50
Bigonial Breadth	—	—	96.64 ±0.55	—	—	—	88.03	86.50	—	97.29 ±0.43	92.0 ±0.60
Inter Orbital	—	—	31.22 ±0.26	—	—	—	32.73	30.44	—	30.99 ±0.13	—
Orbitonasal Arc	—	—	111.12 ±0.50	—	—	—	110.05	107.92	—	112.13 ±0.43	113.0 ±0.60
Nasal Height	45.3	44.0	49.38 ±0.31	45.7	44.7	46.2	48.07	49.04	44.1	45.30 ±0.36	48.0 ±0.40

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4: Biswas D, F-3, 4 (1931-1945) 1956
AW42 Santal AW42
SANTAL PARGANAS
GOND AW 32 •

Nasal Breadth	40.1	39.2	39.95 ±0.22	40.6	40.2	39.8	39.65	39.84	41.0	37.60 ±0.20	37.0 ±0.30
Nasal depth	...	...	23.32 ±0.21	...	...	...	16.33	15.86	...	16.30 ±0.13	...
Superior Facial Height	...	...	64.26 ±0.35	...	...	...	63.60	63.84	...	55.13 ±0.41	71.0 ±0.30
Total Facial Height	...	...	113.44 ±0.60	...	...	...	113.22	110.40	...	111.70 ±0.62	113.0 ±0.50
Horizontal circumference of Head	...	...	534.44 ±1.48	...	...	...	...	...	...	534.10 ±0.12	...
Transverse Arc	...	...	331.46 ±0.91	...	...	...	...	...	...	336.00 ±0.12	...
Sagittal Arc	...	...	307.12 ±1.13	...	...	...	...	...	...	334.60 ±0.13	...

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